WHAT IS TO BE CLAIMED:

1. A method for augmenting an immune response in a patient, comprising

(a) administering an amount of at least one composition comprising molecules having at least one IL-18 biological activity to the patient sufficient to generate an increase in the number of the patient's dendritic cells.

2. A method according to claim 1, further comprising

(b) administering at least one composition comprising at least one selected from the group consisting of flt3-ligand, GM-CSF, IL-4, TNF-α, IL-3, c-kit ligand, and fusions of GM-CSF and IL-3.

3. A method for augmenting an immune response in a patient having an infectious disease, comprising

(a) administering IL-18 to said patient in an amount sufficient to generate an increase in the number of the patient's dendritic cells.

4. A method according to claim 3, further comprising

(b) administering one or more of the molecules selected from the group consisting of flt3-ligand, GM-CSF, IL-4, TNF-α, IL-3, c-kit ligand, and fusions of GM-CSF and IL-3.

5. A method according to claim 3, wherein the infectious disease is HIV.

6. A method for augmenting an immune response in a patient having a cancerous or neoplastic disease, comprising

(a) administering IL-18 in an amount sufficient to generate an increase in the number of the patient's dendritic cells.

7. A method according to claim 6, further comprising the step of administering one or more of the molecules selected from the group consisting of flt3-ligand, GM-CSF, IL-4, TNF-α, IL-3, c-kit ligand, and fusions of GM-CSF and IL-3.

8. A preparation of dendritic cells having at least two cell surface markers selected from the group consisting of CD1a, HLA-DR and CD86, produced by contacting hematopoietic stem or progenitor cells with IL-18.

9. A dendritic cell preparation according to claim 8 produced further by contacting the hematopoietic stem or progenitor cells with a molecule selected from the group consisting of flt3-ligand, GM-CSF, IL-4, TNF-α, IL-3, c-kit ligand, and fusions of GM-CSF and IL-3.

10. An antigen-expressing dendritic cell population produced by the process of (a) contacting hematopoietic stem or progenitor cells with IL-18 in an amount sufficient to generate a dendritic